

# EXHIBIT A

IN THE CIRCUIT COURT OF JEFFERSON COUNTY, ALABAMA  
TENTH JUDICIAL CIRCUIT, BIRMINGHAM DIVISION

STATE OF ALABAMA, )  
Plaintiff, )  
v. )  
VOLKSWAGEN AG; AUDI AG; )  
VOLKSWAGEN GROUP OF AMERICA INC. ) Civil Action No. \_\_\_\_\_  
(d/b/a VOLKSWAGEN OF AMERICA INC.); )  
AUDI OF AMERICA, LLC; )  
DR. ING. H.C.F. PORSCHE AG; and, )  
PORSCHE CARS NORTH AMERICA, INC., )  
Defendants. )

**COMPLAINT**

**Complaint in State Law for Penalties**

The State of Alabama, by and through its Attorney General, brings the following action for penalties under the Alabama Environmental Management Act and the Alabama Air Pollution Control Act against Volkswagen AG; Audi AG; Volkswagen Group of America, Inc.; Audi of America, LLC (collectively “Volkswagen”); Dr. Ing. h.c. F. Porsche AG; and, Porsche Cars North America, Inc. (collectively “Porsche,” and all collectively “Defendants”).

**NATURE OF THE ACTION**

1. The Alabama Air Pollution Control Act (“AAPCA”) forbids any person or business from causing the disconnection or disabling of a vehicle’s exhaust emissions control system. Defendants intentionally violated the AAPCA for nearly a decade.

2. Starting with model year 2009, Defendants installed software designed to cheat emissions standards in certain Audi, Porsche, and Volkswagen diesel engines vehicles (“subject vehicles”). This software, known as a “defeat device,” disabled a subject vehicle’s exhaust emissions control system any time the vehicle was being driven on roads and highways.

3. Defendants have admitted the requisite facts. In a June 2016 Settlement Agreement with the State regarding their liability for deceptive advertising, Defendants admitted that the defeat device software it installed on subject vehicles (1) “enables the vehicles’ ECMs to detect when the vehicles are being driven on the road rather than undergoing Federal Test Procedures” and (2) “renders certain emission control systems in the vehicles inoperative when the ECM detects the vehicles are not undergoing Federal Test Procedures.”

4. The AAPCA levies a penalty of up to \$25,000 each time Defendants caused a vehicle’s emissions control system to be disabled.

5. Defendants sold or leased more than 4,600 subject vehicles in Alabama.

6. Under the authority of the AAPCA and the Alabama Environmental Control Act, the Attorney General seeks an order requiring Defendants to pay the maximum penalty allowed by the AAPCA, plus costs and fees.

#### **PARTIES, JURISDICTION, AND VENUE**

##### *Parties*

7. Plaintiff is the State of Alabama, one of the sovereign States of the United States of America (referred to throughout as “Alabama” or the “State”). As chief law officer of the State, the Attorney General is statutorily authorized to initiate and maintain this action on behalf of the State. Ala. Code §§ 8-19-8; 8-19-11; 22-22A-5.

8. Defendant Volkswagen AG is a corporation organized under the laws of Germany that has its principal place of business in Wolfsburg, Germany. Volkswagen AG is the parent corporation of Audi AG and Volkswagen Group of America, Inc.

9. Defendant Volkswagen Group of America, Inc. (“VWGOA”) is a corporation doing business in all fifty (50) states and the District of Columbia. Volkswagen America is organized under the laws of the State of New Jersey and has its principal place of business located at 2200 Ferdinand Porsche Drive, Herndon, Virginia. VWGOA is a wholly-owned subsidiary of Volkswagen AG. Within VWGOA, the Engineering and Environmental Office (“EEO”) interacts with US regulators and handles regulatory compliance and certification-related issues for Volkswagen AG and Audi AG. Audi of America, Inc. is an operating unit of VWGOA.

10. The VW Group is an organizational and trade term referring to Volkswagen AG’s automotive brands (including Volkswagen Passenger Cars and subsidiaries Audi and Porsche) and financial services business. Volkswagen AG and the VW Group are managed by Volkswagen AG’s Board of Management. A Supervisory Board appoints, monitors, and advises the Board of Management and issues its rules. Each brand in the VW Group also has its own Brand Board of Management. The members of the Brand Boards of Management manage their respective brands, pursuant to targets and requirements laid down by the Volkswagen AG Board of Management.

11. Defendant Audi AG is a corporation organized under the laws of Germany that has its principal place of business in Ingolstadt, Germany. Audi AG is a member of the VW Group, and Volkswagen AG owns more than 99% of Audi AG stock.

12. Defendant Audi of America LLC, also known as Audi of America, Inc. (“AOA”), is a wholly owned operating unit of VWGOA. VWGOA is responsible for the acts of AOA in Alabama. AOA is closely controlled and directed by Volkswagen AG and Audi AG.

13. Defendant Dr. Ing. h.c. F. Porsche AG d/b/a Porsche AG (“Porsche”) is a corporation organized under the laws of Germany that has its principal place of business in

Stuttgart, Germany. Porsche is a member of the VW Group and is a wholly-owned subsidiary of Volkswagen AG.

14. Defendant Porsche Cars North America, Inc. (“Porsche NA”) is a Delaware corporation that has its principal place of business at 1 Porsche Drive, Atlanta, Georgia. Porsche NA is a wholly owned subsidiary of Porsche and is closely controlled and directed by Porsche.

15. Defendants sell their vehicles at numerous dealerships throughout the State of Alabama, including but not limited to the following dealerships in Jefferson County: Royal Volkswagen, which sold and/or presently sells subject Volkswagen vehicles at its dealership in Birmingham; Audi Birmingham (formerly Tom Williams Audi), which sold and/or presently sells subject Audi vehicles at its dealership in Irondale; and Porsche Birmingham (formerly Tom Williams Porsche), which sold and/or presently sells subject Porsche vehicles at its dealership in Irondale.

***Jurisdiction***

16. This court has jurisdiction over the State’s claims, which are raised under the Alabama Air Pollution Control Act and the Alabama Environmental Management Act. Ala. Code §§ 12-11-30, 12-11-31, 22-22A-5, 22-28-14.

***Venue***

17. Venue is proper in Jefferson County because Defendants do business in Jefferson County and/or because Defendants committed the unlawful acts described herein in Jefferson County, among other places in Alabama. Ala. Code §§ 22-22A-5(18), -5(19).

## MISCELLANEOUS LEGAL ISSUES

### *Claims Arising from the Same Set of Facts*

18. Defendants' actions described in paragraphs 23-86 also constitute multiple violations of Alabama's Deceptive Trade Practices Act ("DTPA"). Ala. Code § 8-19-5. On or about June 27, 2016, the State and Defendants reached an agreement to settle all claims under the Alabama DTPA without litigation. The State will file a separate complaint and Consent Judgment with this Court concerning those claims.

19. As part of the DTPA settlement, Defendants agreed that the State had reserved the ability to litigate the state-law "anti-tampering" claims pleaded herein. Thus, the defenses of claim splitting, *res judicata*, and other legal theories based upon the filing of distinct complaints arising from the same set of facts do not apply to this complaint or the subsequent DTPA complaint. *See* Restatement (Second) of Judgments § 26(1).

### *Federal Litigation / MDL 2672*

20. The State is aware that on December 8, 2015, the United States Judicial Panel on Multidistrict Litigation issued an order that consolidated federal proceedings against Volkswagen in the United States District Court for the Northern District of California.

21. This complaint does not raise a claim under the Constitution, laws, or treaties of the United States, nor do the pleaded claims raise federal issues; thus, it is not subject to removal to federal court and/or consolidation into MDL 2672. 28 U.S.C. §§ 1331, 1407.

### *Reservation of Rights*

22. The State reserves the right to amend this complaint to supplement the State's factual allegations, to supplement the claims pleaded herein, or to assert additional claims against Defendants named herein and/or against any additional parties.

## FACTUAL ALLEGATIONS

23. Unless otherwise stated, the factual allegations below are based upon information obtained from publicly available reports, documents produced by Defendants to the State or the multistate coalition, and the testimony or pleas of Defendants' current and former employees.

24. At all times material to this complaint, Defendants worked in concert with the common objective of engaging in the deceptive practices described herein. Each Defendant was, and still is, an agent of the other Defendants for the achievement of this common objective, and each has acted, and is acting, for the common goals and profit of all Defendants. Therefore, all acts and knowledge ascribed to one Defendant are properly imputed to the others.

25. At a minimum, each Defendant knowingly and intentionally provided other Defendants with substantial assistance, or aided and abetted other Defendants, in carrying out the actions described herein.

**A. Volkswagen introduced diesel vehicles with the defeat device into the American market to reproduce Volkswagen's European successes.**

26. Beginning in the 1990s, Volkswagen rapidly expanded its sales of light duty diesel vehicles in Europe. To build on its success in Europe, and in response to Toyota's commercial growth in the United States with its environmentally advanced hybrid technology, Volkswagen designed and developed a line of diesel turbocharged direct injection ("TDI") 2.0-liter and 3.0-liter light duty diesel vehicles (the "subject vehicles") for marketing and sale throughout the United States, including Alabama.

27. Through marketing and advertising, Volkswagen sought to transform American consumers' opinion of diesel engine vehicles as noisy and smoky workhorses into one of smooth-running, high-technology automobiles that simultaneously deliver fuel efficiency, high performance, and low nitrous oxide ("NO<sub>x</sub>") emissions.

28. The subject vehicles include the following makes and models sold or leased in the United States for the 2009 through 2016 model years:

### 2.0 LITER DIESEL MODELS

Model Year	Generation/Engine	EPA Test Group	Vehicle Make and Model(s)
2009	Gen 1 / EA189	9VWXV02.035N 9VWXV02.0U5N	VW Jetta, VW Jetta Sportwagen
2010	Gen 1 / EA189	AVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2011	Gen 1 / EA189	BVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2012	Gen 1 / EA189	CVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2013	Gen 1 / EA189	DVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2014	Gen 1 / EA189	EVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen
2012 2013 2014	Gen 2 / EA189	CVWXV02.0U4S DVWXV02.0U4S EVWXV02.0U4S	VW Passat
2015	Gen 3 / EA288	FVGAV02.0VAL	VW Beetle, VW Beetle Convertible, VW Golf, VW Golf Sportwagen, VW Jetta, VW Passat, Audi A3

### 3.0 LITER DIESEL MODELS

Model Year	EPA Test Group(s)	Vehicle Make and Model(s)
2009	9ADXT03.03LD	VW Touareg Audi Q7
2010	AADXT03.03LD	VW Touareg Audi Q7
2011	BADXT03.02UG BADXT03.03UG	VW Touareg Audi Q7

2012	CADXT03.02UG CADXT03.03UG	VW Touareg Audi Q7
2013	DADXT03.02UG DADXT03.03UG DPRXT03.0CDD	VW Touareg Audi Q7 Porsche Cayenne Diesel
2014	EADXT03.02UG EADXT03.03UG EPRXT03.0CDD EADXJ03.04UG	VW Touareg Audi Q7 Porsche Cayenne Diesel Audi A6 Quattro, A7 Quattro, A8, A8L, Q5
2015	FVGAT03.0NU2 FVGAT03.0NU3 FPRXT03.0CDD FVGAJ03.0NU4	VW Touareg Audi Q7 Porsche Cayenne Diesel Audi A6 Quattro, A7 Quattro, A8, A8L, Q5
2016	GVGAT03.0NU2 GPRXT03.0CDD GVGAJ03.0NU4	VW Touareg Porsche Cayenne Diesel Audi A6 Quattro, A7 Quattro, A8, A8L, Q5

For clarity, the State will refer to the 2.0-liter Generation 1/EA-189s, the Generation 2/EA-189s, and the Generation 3/EA-288s identified above as “Generation 1s,” “Generation 2s,” and “Generation 3s” respectively, and will refer to them collectively as the model “2.0s.” The State will refer to 3.0 liter models collectively as the model “3.0s.” The model 2.0s and 3.0s will be referred to collectively as “the subject vehicles”.

29. As described in more detail below, the diesel exhaust technology Defendants designed and implemented in the subject vehicles changed over time and across engine generations, but certain emissions control features remained constant: all subject vehicles were equipped with a diesel particulate filter (“Diesel Particulate Filter,” “DPF,” or “soot filter”) and employed exhaust gas recirculation (“Exhaust Gas Recirculation” or “EGR”).

30. Exhaust Gas Recirculation is used primarily to reduce NO<sub>x</sub> emissions by diverting exhaust gases to the intake system and mixing them with fresh air, thereby reducing the amount of oxygen in the engine, lowering the combustion temperature, and reducing creation of NO<sub>x</sub>.

31. The DPF removes particulate emissions or “soot” from the engine’s exhaust. Soot accumulates in the DPF until it is periodically burned off and emitted as ash.

32. While both technologies have emissions-related advantages (EGR reduces NO<sub>x</sub> emissions, while DPF reduces soot emissions), they also have disadvantages. First, use of EGR increases particulate emissions (soot), and necessitates more frequent DPF regeneration to prevent clogging, thereby placing strain on the DPF and increasing the risk of premature DPF failures. Second, regeneration of the DPF increases NO<sub>x</sub> emissions, increases fuel consumption, and places strain on the engine and the components of the emissions control system, including the DPF itself, due to the high temperatures needed for regeneration.

33. Defendants chose to “solve” these engineering challenges by creating and installing the defeat device on its vehicles.

**B. Defendants developed, refined, and implemented the defeat device across six different lines of vehicles.**

34. Defendants’ implementation of the defeat device was not a one-time, isolated event. Rather, Defendants engaged in a decade-long process of developing and refining the defeat device for use in multiple lines of Volkswagen, Audi, and Porsche vehicles.

***The First Defeat Device: Audi’s Model Year 2004-2008 V6 (European Market)***

35. Audi encountered early emissions-related engineering challenges in 1999, as it developed its large 3.0-liter V6 diesel luxury cars for the European market.

36. Engineers at Audi AG headquarters in Neckarsulm, Germany had developed a new technology for the engine called “Pilot Injection” that could eliminate the traditional clattering noise of diesel engines at start-up through the injection of additional fuel into the engine on ignition. However, activation of Pilot Injection upon ignition caused the engine to exceed

European emissions standards during the laboratory test cycle on the rolling dynamometer (or “dyno”) the European authorities used for emissions testing.

37. Audi solved this problem by developing software for the engine control unit (“Engine Control Unit” or “ECU”) that allowed the engine to deactivate Pilot Injection during dyno testing.

38. Technology that recognizes when a vehicle is undergoing dyno testing and runs the engine in a less polluting way than on the road in order to defeat an emissions testing regime is known in the industry as a “cycle-beater” and is known legally as a “defeat device.”

39. Audi developed and deployed this defeat device software on its European-market Audi 3.0-liter V6 diesels from 2004-2008. Because of its noise-reducing properties, Audi dubbed its defeat device the “Acoustic Function.”

#### ***The Second Defeat Device: Volkswagen’s Generation 1s***

40. As it was planning to launch its Generation 1 diesels in the United States in the early-mid 2000s, Volkswagen explored equipping its Generation 1 engines with selective catalytic reduction (“Selective Catalytic Reduction” or “SCR”) emissions technology, which chemically reduces NO<sub>x</sub> emissions by spraying liquid urea—or, “AdBlue” as is it called in the trade—in the exhaust stream.

41. But at that time, Volkswagen’s competitor, Mercedes Benz, licensed the available SCR technology, and utilizing an SCR system would have required outfitting the Generation 1 vehicles with one or more tanks capable of storing gallons of liquid urea.

42. Rather than try to fit its first Generation 1 offering (the small model year 2009 Jetta) with one or more of several-gallon urea tanks, Volkswagen decided to develop a simpler, in-house

emissions system, known as a Lean-NO<sub>x</sub> Trap (“Lean Trap”). The Lean Trap did not depend on SCR and therefore did not require urea tanks.

43. The Lean Trap emissions system operated by trapping the NO<sub>x</sub> emissions in a catalytic converter and then periodically running the engine in a fuel-rich mode to “regenerate” the catalytic converter, transforming the stored NO<sub>x</sub> into nitrogen and oxygen.

44. But the Lean Trap system had a downside: Each Lean Trap regeneration produced excess soot for the DPF to filter, thereby requiring more frequent DPF regenerations. As described above, DPF regenerations increased NO<sub>x</sub> emissions, increased fuel consumption, and placed strain on the engine and the components of the emissions control system, due to the increased temperature needed for regeneration.

45. Early in the development of the Lean Trap system, it became apparent to Volkswagen’s engineers that regenerating the Lean Trap as frequently as necessary to bring NO<sub>x</sub> emissions within legal limits would produce too much soot. That soot would in turn clog and break the engine’s DPF within just 50,000 miles of operation—many times less than the 120,000 (later 150,000) mile full useful life U.S. durability standard Volkswagen was required to meet.

46. Rather than solving these challenges legally, in late 2006, Volkswagen’s Wolfsburg engineers adapted Audi’s “Acoustic Function” defeat device software.

47. Like Audi’s defeat device, the defeat device that Volkswagen engineers installed in the Generation 1’s featured software that could detect when the vehicles were undergoing dyno testing. During dyno testing, the software substantially increased the frequency of Lean Trap regenerations and increased EGR to lower NO<sub>x</sub> emissions. Then, during normal driving conditions, the software substantially reduced Lean Trap regenerations EGR, thereby substantially increasing NO<sub>x</sub> emissions.

48. Volkswagen incorporated the Lean Trap regeneration and EGR defeat devices described above in the ECUs of the 2009-2014 Jetta, Golf, A3 and New Beetle diesel models, collectively over 300,000 vehicles sold in the United States.

***The Third Defeat Device: Audi's 3.0 SUVs***

49. At the same time as Volkswagen engineers in Wolfsburg were developing the Generation 1 diesel engine, their colleagues at Audi's Neckarsulm headquarters were developing a 3.0-liter diesel engine for the anticipated release in model year 2009 of a new line of luxury diesel SUVs in the U.S. market: the SCR-equipped Audi Q7 and Volkswagen Touareg.

50. Adaptation of its European SCR technology for the U.S. market presented a challenge: to comply with federal NO<sub>x</sub> limits and an EPA rule that tied urea tank refills to the manufacturer's 10,000-mile service intervals, Audi's 3.0 liter vehicles in the United States would require larger urea tanks than their European counterparts.

51. In or around July 2006, the issue reached the attention of then-Audi AG (later Volkswagen AG) CEO Martin Winterkorn and then-head of Volkswagen AG Quality Control Matthias Mueller (now Mr. Winterkorn's successor as CEO of Volkswagen AG).

52. Rather than expending the time and money necessary to re-engineer the 3.0s to equip them with larger urea storage tanks, Volkswagen and Audi management tasked the diesel and emissions engineers with making the too-small urea tanks last for 10,000 miles between refills; something they accomplished only by employing yet more defeat device software.

53. Defendants employed both an EGR defeat device and a urea dosing defeat device in the 3.0s. Like the defeat device software Volkswagen implemented in the Generation 1s, the defeat device software Audi implemented in the 3.0s recognized when the vehicle was undergoing dyno testing. During dyno testing, the software optimized the urea dosing and EGR to bring the

NO<sub>x</sub> emissions within regulatory limits. In normal driving conditions, however, the software reduced the urea dosing to conserve urea, and reduced Exhaust Gas Recirculation.

54. Audi approved and installed both the urea-dosing defeat device and the EGR defeat device for production into the 3.0s for sale in the U.S. market from 2009-2016.

***The Fourth Defeat Device: Volkswagen's Generation 2s***

55. In 2009, in connection with the planned roll-out of the SCR-equipped model year 2012 Passat, Volkswagen's engineers faced the same quandary as their colleagues at Audi: urea tanks that were too small to meet the 10,000 mile EPA refill interval requirement.

56. Rather than surmount this challenge legally, Volkswagen again opted to implement defeat device software. Once the software recognized the vehicle was on a dyno, it optimized the urea dosing and EGR to bring the NO<sub>x</sub> emissions within regulatory limits. Outside of test conditions, however, the software reduced the urea dosing rate by half to conserve urea and reduce Exhaust Gas Recirculation.

57. With the approval of Volkswagen supervisory executives, company engineers went forward with the dosing and EGR-defeat devices, installing them in roughly 80,000 Volkswagen Passats in the U.S. market spanning from model years 2012 to 2014.

***The Fifth Defeat Device: the Porsche Cayenne***

58. In 2010, Volkswagen AG acquired Porsche, and the founding family of Porsche became Volkswagen's leading shareholders. The following year, Porsche decided it wanted to enter the U.S. diesel market with its new Cayenne SUV.

59. Porsche approached its sister company Audi about acquiring Audi's 3.0-liter V6 diesel engine for use in the Cayenne. Audi agreed to supply Porsche the engine, lightly re-tuned

for Porsche. In supplying the engine, Audi personnel educated their counterparts at Porsche about the engine's primary features, including its urea-dosing defeat device.

60. In discussions in or around September 2011, Audi engineer Martin Gruber and the then-head of Volkswagen Engine Development, Ulrich Hackenburg, explained to Porsche personnel the 3.0s' urea tank-size limitation, the EPA requirement tying urea refills to service intervals, and the resulting urea-dosing strategy that Audi had devised and implemented.

61. Notwithstanding this information, Porsche's engineering department proceeded to source the Audi defeat-device equipped 3.0-liter engine for its entry into the U.S. diesel market with the model year 2013 Cayenne diesel SUV.

#### ***The Sixth Defeat Device: Volkswagen's Generation 3s***

62. In or about 2013, Volkswagen discontinued the Lean Trap emissions system in favor of an SCR-based system for all its model year 2015 2.0s (the Beetle, Golf, Jetta, Passat, and the Audi A3).

63. In doing so, Volkswagen again opted to implement urea-dosing and EGR defeat devices like those it implemented in the Generation 2s and 3.0s.

64. Volkswagen sold nearly 100,000 model year 2015 Generation 3s. Many of the cars were sold after independent real-world studies made clear that Volkswagen engines were emitting NO<sub>x</sub> in real driving conditions far in excess of the legal limits.

#### **C. Defendants' executives and senior managers knew about the defeat devices.**

65. Defendants' knowledge of the defeat devices' design and implementation reached up to the executive and senior management levels.

66. Information presently available to the State indicates that at least the following persons had knowledge of the defeat devices before Volkswagen publicly acknowledged the devices' existence:

- a. Frank Tuch (2010-2015 head of Volkswagen AG Quality Management and a direct report to Volkswagen AG CEO and Management Board Member, Martin Winterkorn),
- b. Bernd Gottweis (2007-2014 head of Product Safety within Volkswagen AG Quality Management);
- c. Rudolf Krebs, Jens Hadler, Heinz-Jakob Neusser and Friedrich Eichler (heads of Volkswagen AG's Powertrain Development from 2005-2007, 2007-2011, 2011-2013 and 2013-2015, respectively)
- d. Multiple Volkswagen AG division heads, including Hanno Jelden (head of Drive Electronics from Nov. 2005 – Sept. 2015), Falko Rudolph (Diesel Engine Development from Nov. 2006 -Sept. 2010), Stefanie Jauns-Seyfried (head of Functions and Software Development within Powertrain Electronics from Nov. 2005 – Sept. 2015), Richard Dorenkamp and Thorsten Duesterdiek (former (2003-2013) and current (2013-present) heads of Ultra-low Emissions Engines and Exhaust Post-Treatment within Diesel Engine Development), Hermann-Josef Engler (head of Development, Aggregates and Diesel Const. within Diesel Engine Development), Mathias Klaproth (head of Diesel System Applications within Powertrain Electronics);
- e. Numerous managers within these divisions, including Burkhard Veldten, Volker Gehrke, Dieter Mannigel (in Diesel Engine Functions within Powertrain Electronics' Functions and Software Development department) and Andreas Specht, Hartmut Stehr, Michael Greiner and James Liang (in Procedures and Exhaust Post-Treatment within the Diesel Engine Development department); and,
- f. Top Audi engineers, including Giovanni Pamio (General Manager of V6 Diesel Engines), Henning Loerch (Director of Exhaust Gas Aftertreatment) and Martin Gruber (Director of Audi Diesel Engine Thermodynamics Department); and,
- g. The Chief of Porsche Electronics Development, Carsten Schauer.

67. Among other things, communications among these persons detailed the use of the defeat devices to reduce raw emissions during test cycles and reduce EGR and DPF regeneration

during real driving conditions, and otherwise described the expansion, modification and optimization of the cycle-beating Acoustic Function, well into 2014.

**D. Defendants mislead the public by promising “clean diesel” technology, rather than admitting to the existence and effect of the defeat devices.**

68. Despite knowing that the subject vehicles were producing significant amounts of air pollution thanks to the defeat device, Defendants proclaimed their vehicles were both high performance and environmentally friendly in order to boost sales in the United States.

69. Volkswagen embarked on a near decade-long public advertising campaign that referred to its subject vehicles’ engines as “Clean Diesel” engines. Volkswagen spread this deceptive message to Alabama consumers across a wide spectrum of advertising, including television commercials, internet websites, newspaper ads, and window stickers.

70. Contrary to its motto of “Truth in Engineering,” Audi offered similarly deceptive advertisements, touting its AdBlue technology without mentioning the corresponding urea-based defeat device.

71. Porsche also deceptively promoted the effects of its EGR, DPF, and AdBlue technology without mentioning the necessary defeat devices.

**E. Defendants concealed the existence and prevalence of its defeat devices, even after testing led government officials to confront Defendants regarding their existence.**

72. Defendants actively sought to conceal the defeat devices from regulators, researchers, and the public. Among other things, Defendants:

- a. directed the removal of reference to the defeat device (or the “acoustic function” as it was called internally) from ECU documentation;
- b. buried the results of 2012-2013 internal testing that reflected real world NO<sub>x</sub> emissions that exceeded U.S. limits by many multiples;
- c. denied independent researchers access to data that would confirm NO<sub>x</sub> discrepancies between testing and real driving conditions in Volkswagen’s U.S. fleet; and,

- d. failed to disclose the illegal, emissions-increasing defeat devices in their certification-related submissions to state and federal regulators while falsely representing full compliance with applicable emissions and durability standards.

73. The defeat devices were eventually discovered, however. On March 31, 2014, an Audi AG engineer alerted colleagues at Volkswagen AG and VWGOA EEO to the upcoming publication of a report by the West Virginia University's Center for Alternative Fuels, Engines & Emissions commissioned by the International Council on Clean Transportation (the "ICCT Report") that found real world emissions from two of the three light duty diesel vehicles it tested contained levels of  $\text{NO}_x$  between five and thirty-five times higher than the legal emissions limits. A few days later, ICCT researchers confirmed the findings and vehicles tested to VWGOA.

74. Documents and information provided by managing engineers to multiple senior management officials shortly after the ICCT report demonstrate that Defendants knew that (a) the existence of the defeat devices would readily explain the findings contained in the ICCT Report and (b) Defendants would be subject to significant penalties if it admitted the defeat devices were the correct explanation.

75. To hide their misdeeds, Defendants embarked on a 17+ month campaign to mislead and confuse regulators and the public about the true cause of the findings in the ICCT Report. Examples of deceptive actions Defendants and/or their employees took during this time period (*i.e.* April 2014 through September 2015) include, but are not limited to:

- a. Publicly denying that subject vehicles failed emissions requirements;
- b. Deleting or removing incriminating data about the defeat devices from the company's records upon notice that a litigation hold was about to be issued;
- c. Proposing recalls to perform emissions software updates on Generation 1s and 2s, despite knowing that the updated software would increase fuel consumption while only reducing emissions to 5-10x legal limits;

- d. Using a September 2014 change to EPA rules regarding the decoupling of urea tank refills from service intervals as a pretext to update the software in Generation 3s vehicles that had yet to reach regulators and customers;
- e. Attributing failed emissions testing of Audi subject vehicles on driving conditions in Los Angeles; and,
- f. Failing to provide the California Air Regulation Board (“CARB”) with direct answers to repeated questions regarding failed on-road emissions tests.

76. A primary reason that Volkswagen continued its deception after the 2014 ICCT Report was to secure government authorization to sell Model Year 2015 and 2016 Generation 3s.

77. In an effort to secure authorization to sell Generation 3s, Defendants finally admitted to CARB officials on September 3, 2015, that Generation 2s contained an illegal defeat device and that the Generation 2s’ engine control unit had two calibrations: one for real world driving (Calibration 1) and another for testing (Calibration 2).

78. On September 18, 2015, CARB sent an “In-Use compliance” letter to Volkswagen describing its investigation of the “reasons behind these high NO<sub>x</sub> emissions observed on their 2.0-liter diesel vehicles over real world driving conditions []” and its related discussions with Volkswagen. According to CARB, those discussions “culminated in VW’s [September 3, 2015] admission to CARB and EPA staff that it has, since model year 2009, employed a defeat device to circumvent CARB and the EPA emission test procedures.”

79. On the same day, the United States EPA issued to Volkswagen a Notice of Violation reflecting the agency’s determination that:

VW manufactured and installed defeat devices in certain model year 2009 through 2015 diesel light-duty vehicles equipped with 2.0 liter engines. These defeat devices bypass, defeat, or render inoperative elements of the vehicles’ emissions control system that exists to comply with [Clean Air Act] emission standards... Additionally, the EPA has determined that, due to the existence of the defeat devices in these vehicles, these vehicles do not conform in all material respects to the vehicle specifications described in the applications for the certificates of conformity that purportedly cover them.

80. Undeterred by the violation notices on Generation 2s, Volkswagen continued to deny the existence of the defeat device on Generation 3s.

81. CARB then conducted its own special cycle testing on a Model Year 2016 Audi A6 and a Model Year 2014 Volkswagen Touareg, both Generation 3s.

82. Thereafter, EPA and CARB issued a second round of notices on November 2, 2015, which notified Volkswagen that regulators had conducted defeat device screening and certification testing on these Generation 3s vehicles and “observed the same type of emissions behaviors as those in which VW has admitted defeat devices exist. These activities corroborate testing conducted by U.S. EPA and Environment Canada on a 2014 VW Touareg (Test Group EADXT03.02UG) and a 2015 Porsche Cayenne (Test Group FPRXT03.0CDD), respectively. This testing has also yielded evidence of a defeat device.”

83. On November 20, 2015, CARB issued a press release reporting that in a meeting with EPA and CARB on the previous day, “VW and AUDI told EPA and CARB that the issues raised in the In-Use Compliance letter extend to all 3.0-liter diesel engines from model years 2009 through 2016.” Thereafter, in an In-Use Compliance Letter dated November 25, 2015, CARB confirmed its determination “that all 3.0-liter model years 2009-2016 test groups of the [Audi AG, Porsche AG, Porsche Cars North America, Volkswagen AG, and Volkswagen Group of America, Inc.] are in noncompliance with CARB standards[.]”

84. Since that announcement, at least one Volkswagen manager has agreed to plead guilty to federal crimes for his part in the design, installation, and cover-up of the defeat device. Specifically, James Liang, who has served as VWGOA’s Leader of Diesel Competence since 2008, has agreed that he conspired with others to defraud the United States, to commit federal wire fraud, and to violate the federal Clean Air Act.

**F. Defendants admitted the installation and effect of the defeat device software as part of their settlement of the State's deceptive trade practice claims.**

85. On or about June 27, 2016, Defendants and a group of States, including Alabama, entered into a Partial Settlement Agreement to resolve the States' claims under their respective Deceptive Trade Practice laws.

86. As part of that agreement, Defendants made the following admissions regarding the defeat devices:

Admissions. Volkswagen admits: (a) that software in the 2.0 Liter Subject Vehicles enables the vehicles' ECMs to detect when the vehicles are being driven on the road, rather than undergoing Federal Test Procedures; (b) that this software renders certain emission control systems in the vehicles inoperative when the ECM detects the vehicles are not undergoing Federal Test Procedures, resulting in emissions that exceed EPA-compliant and CARB-compliant levels when the vehicles are driven on the road; and (c) that this software was not disclosed in the Certificate of Conformity and Executive Order applications for the 2.0 Liter Subject Vehicles, and, as a result, the design specifications of the 2.0 Liter Subject Vehicles, as manufactured, differ materially from the design specifications described in the Certificate of Conformity and Executive Order applications.

### **CLAIMS FOR RELIEF**

**Count 1: Multiple Violations of ADEM Admin. Code r. 335-3-9-06**

87. The State realleges each and every allegation set forth in all preceding paragraphs as if fully restated herein.

88. The Alabama Environmental Management Act ("AEMA") vests the Alabama Department of Environmental Management ("ADEM") with the authority to administer and enforce the Alabama Air Pollution Control Act ("AAPCA"). Ala. Code § 22-22A-5.

89. The AAPCA gives ADEM the authority to establish rules and regulations governing a vehicle's emissions control system. Ala. Code § 22-18-12.

90. ADEM has established regulations governing a vehicle's emissions control systems in Chapter 335-3-9 of its Administrative Code. ADEM Admin. Code r. 335-3-9.

91. Chapter 335-3-9-.06 of the ADEM Administrative Code states that “no person shall cause, suffer, allow, or permit the removal, disconnection, and/or disabling of a positive crankcase ventilator, exhaust emission control system, or evaporative loss control system which has been installed on a motor vehicle.”

92. Defendants are “person[s]” within the meaning of the AEMA, the AAPCA, and the ADEM Administrative Code.

93. By installing the defeat device on a subject vehicle, Defendants and/or persons acting on behalf of Defendants caused or allowed the disconnection or disabling of the exhaust emission control system(s) on that subject vehicle each and every time the subject vehicle was operating outside of dyno testing conditions.

94. Defendants have admitted (among other things) that the defeat device software they installed on subject vehicles “renders certain emission control systems in the vehicles inoperative when the ECM detects the vehicles are not undergoing Federal Test Procedures[.]” *See supra* at ¶85.

95. The AEMA vests the Attorney General with the authority to enforce ADEM’s regulations by commencing a civil action in circuit court if the regulations have been violated. Ala. Code §§ 22-22A-5(12), 22-22A-5(18).

96. The AEMA provides that a civil penalty of up to \$25,000 may be imposed for each violation of the AAPCA and that each day such violation continues shall constitute a separate violation. Ala. Code § 22-22A-5(18)(c).

97. Due to the egregiousness of Defendants’ unlawful actions and Defendants’ attempts to cover up the illegality of their actions, Defendants should be required to pay the maximum penalty of \$25,000 per day, per violation.

**PRAYER FOR RELIEF**

The State of Alabama requests judgment against Defendants, jointly, severally, and solidarily, as follows:

1.     Penalties at the maximum level allowed by state law;
2.     Fees and costs of litigation; and,
3.     Other relief under state law that the Court deems just and appropriate.

Respectfully Submitted,

**LUTHER J. STRANGE**  
*Attorney General*

/s/ Corey L. Maze \_\_\_\_\_.  
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